

REMARKS

The Advisory Action that was mailed August 27, 2007, stated that Applicant's reply filed August 6, 2007, failed to place the application in condition for allowance. Applicant's August 6, 2007 reply was filed in response to a Final Office Action that was mailed May 4, 2007. The Final Office Action maintained the rejections of claims 1-15 and 25. Claims 1-15 and 25 are pending. Applicant has now amended independent claims 1, 15 and 25 to more particularly define the subject matter sought to be patented, and has amended dependent claims 4-8 and 11 for consistency with amended claim 1. The amendments add no new matter. Applicant respectfully requests reconsideration of claims 1-15 and 25 in view of the above amendments and the following remarks.

Response to Provisional Double Patenting Rejection

The Advisory Action maintained the provisional double patenting rejections from the Final Office Action, which rejected claims 1, 2 and 9 on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 5-6, 9 and 16 of co-pending Application No. 10/665249. The Examiner noted that the rejection was a provisional rejection because none of the claims at issue have been patented. Applicant notes the Office's concern, but does not concede the correctness of the provisional rejection. Should a non-provisional double patenting rejection be issued following allowance of one set of allegedly conflicting claims, Applicant will respond at that time.

Claim Amendments

Applicant has amended each of independent claims 1, 15 and 25 in similar fashion to more particularly define the subject matter sought to be patented, and has amended dependent claims 4-8 and 11 for consistency with amended claim 1. The amendments add no new matter, and are fully supported by Applicant's specification as originally filed.

Amended claim 1 recites a computer system to invoke multiple executions of an analytical task and provide an analytical output, (*see*, for example, Applicant's specification at

figures 1-2; page 2, lines 6-9; page 12, lines 3-15), in response. The computer system is programmed to receive a request for analytical information from a front-end software application, (*see*, for example, Applicant's specification at figures 1-2; page 2, lines 6-9; page 3, lines 11-12), the analytical information to indicate a likelihood of an event occurrence with regard to an identified entity, (*see*, for example, Applicant's specification at page 3, lines 11-12; page 7, lines 28-29; page 12, lines 3-15), the analytical information to be determined using any of multiple information values that are to be identified as associated with the identified entity, (*see*, for example, Applicant's specification at page 2, lines 6-19; page 3, lines 11-27; page 5, lines 4-15). The computer system is also programmed to use the request to identify at least one first information value of the multiple information values, (*see*, for example, Applicant's specification at page 2, lines 6-11; page 3, lines 11-13), and invoke a first execution of the analytical task by providing the at least one first information value to a first analytical engine, wherein at least one second information value of the multiple information values has not yet been identified when the first execution is invoked, (*see*, for example, Applicant's specification at page 3, lines 11-19; page 5, lines 4-15; page 6, lines 6-23). The computer system is further programmed to identify, using the request, the at least one second information value after invoking the first execution (*see*, for example, Applicant's specification at page 5, lines 7-15; page 6, lines 3-23), and invoke a second execution of the analytical task by providing the at least one first and the at least one second information values to a second analytical engine, (*see*, for example, Applicant's specification at figures 1-2; page 3, lines 15-19; page 4, lines 13-15; page 6, lines 24-26). The computer system is further programmed to provide an output to the front-end software application in response to the request, the output indicating the likelihood of the event occurrence determined using a result from at least one of the first and second executions of the analytical task, (*see*, for example, Applicant's specification at figures 1-2; page 12, lines 3-15; page 12, line 23 to page 13, line 4).

Response to Claim Rejections – 35 U.S.C. § 102

The Advisory Action maintained the rejections of claims 1-15 and 25 from the Final Office Action, which rejected claims 1-15 and 25 under 35 U.S.C. § 102(e) as being anticipated

by Wocke (U.S. Patent Publication 2006/0161814). Of these, claims 1, 15 and 25 are independent.

The above rejection is moot in view of the above amendments of the independent claims. Without conceding that the rejection has merit, Applicant submits that independent claim 1, as amended, is patentable over Wocke, as are dependent claims 2-14.

Wocke discloses a method and system of data analysis using neural networks. (Title). Convergence testing is performed to check for convergence of a training algorithm. (Abstract). Wocke discloses repeated execution of a distance calculation algorithm that attempts to determine a most similar matching node. (Figure 2; paragraph 0105). A control variable "t" is initialized to 0 and the algorithm is executed; the control variable is then incremented by one prior to each subsequent execution of the algorithm. (Figure 2; paragraph 0105).

Wocke does not disclose or suggest, as recited in amended claim 1, a computer system programmed to "provide an output to the front-end software application in response to the request, the output indicating the likelihood of the event occurrence determined using a result from at least one of the first and second executions of the analytical task." Wocke similarly does not disclose or suggest a computer system programmed to "invoke a first execution of the analytical task by providing the at least one first information value to a first analytical engine, wherein at least one second information value of the multiple information values has not yet been identified when the first execution is invoked," as recited in amended claim 1. Wocke additionally fails to disclose or suggest a computer system programmed to "identify, using the request, the at least one second information value after invoking the first execution," and "invoke a second execution of the analytical task by providing the at least one first and the at least one second information values to a second analytical engine," as recited in amended claim 1.

In contrast, Wocke discloses an algorithm to detect convergence on data nodes in a neural network. This is completely different than the system recited in Applicant's claim 1, and does not "provide an output to a front-end software application" that "indicat[es] a likelihood of an event occurrence determined using a result from at least one of the first and second executions of the analytical task." Also, with each execution of the Wocke algorithm, a counter is simply incremented by one and the algorithm is rerun on the data set. That is, the first time the Wocke algorithm is run, the counter $t=0$; the second time, $t=1$; the third time, $t=2$, etc., in predictable and

identifiable fashion. Wocke does not disclose “at least one second information value . . . has not yet been identified when the first execution is invoked.” Similarly, Wocke does not disclose a system that “identif[ies], using the request, the at least one second information value after invoking the first execution,” and then “invoke[s] a second execution . . . by providing the at least one first and the at least one second information values to a second analytical engine.” As described, subsequent executions of the Wocke algorithm take as input an incremented counter, and nowhere is a second execution invocation “by providing the at least one first [used to previously invoke the first execution] and the at least one second [identified after invoking the first execution] information values to a second analytical engine” disclosed.

Neither is Applicant's claim 1 obvious in view of Wocke, because advantages that may be realized using some implementations of the system recited in Applicant's claim 1 are not contemplated by Wocke. For example, some implementations of the computer system recited in Applicant's claim 1 are capable of incrementally and asynchronously executing analytical tasks to provide results that may be available very quickly or with higher quality, which may provide a user or system with result options that may be appropriate for varying application requirements. By way of example, Applicant's specification at page 10, line 3 to page 13, line 4, describes a call-center example where a call-center agent uses an implementation of the system recited in claim 1 to respond to a customer calling to complain about a damaged product. During the call, the agent or the system identifies data values at different points in time, first identifying at least one first data value (e.g., the total amount purchased by the customer over the last three years, the number of complaints that the customer has submitted), and later identifying at least one second data value (e.g., the customer's income level). A first prediction task is invoked using the at least one first data value after it is identified, but before the at least one second data value is identified. Before this first task completes, in this example, the at least one second data value is identified and used, along with the at least one first data value, to invoke a second predictive task. A result from the first task may be available sooner than a result from the second task, which may be advantageous in situations where the call-center agent or system requires a quick result. A result from the second task may be of higher quality than the first result, which may be advantageous in situations where the call-center agent or system requires a more accurate result.

Accordingly, claim 1 is patentable over Wocke, as are dependent claims 2-14. Claims 15 and 25 are similarly patentable over Wocke for at least the reasons discussed above with respect to claim 1. As such, Applicant asks that the anticipation rejections of claims 1-15 and 25 be withdrawn.

Conclusion

Applicant submits that each of claims 1-15 and 25 are in condition for allowance, and asks that a notice of allowance be issued.

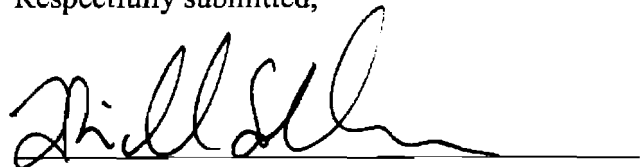
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: _____

11/5/07


J. Richard Soderberg, Reg. No. 43,352

Fish & Richardson P.C.
60 South Sixth Street
Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696